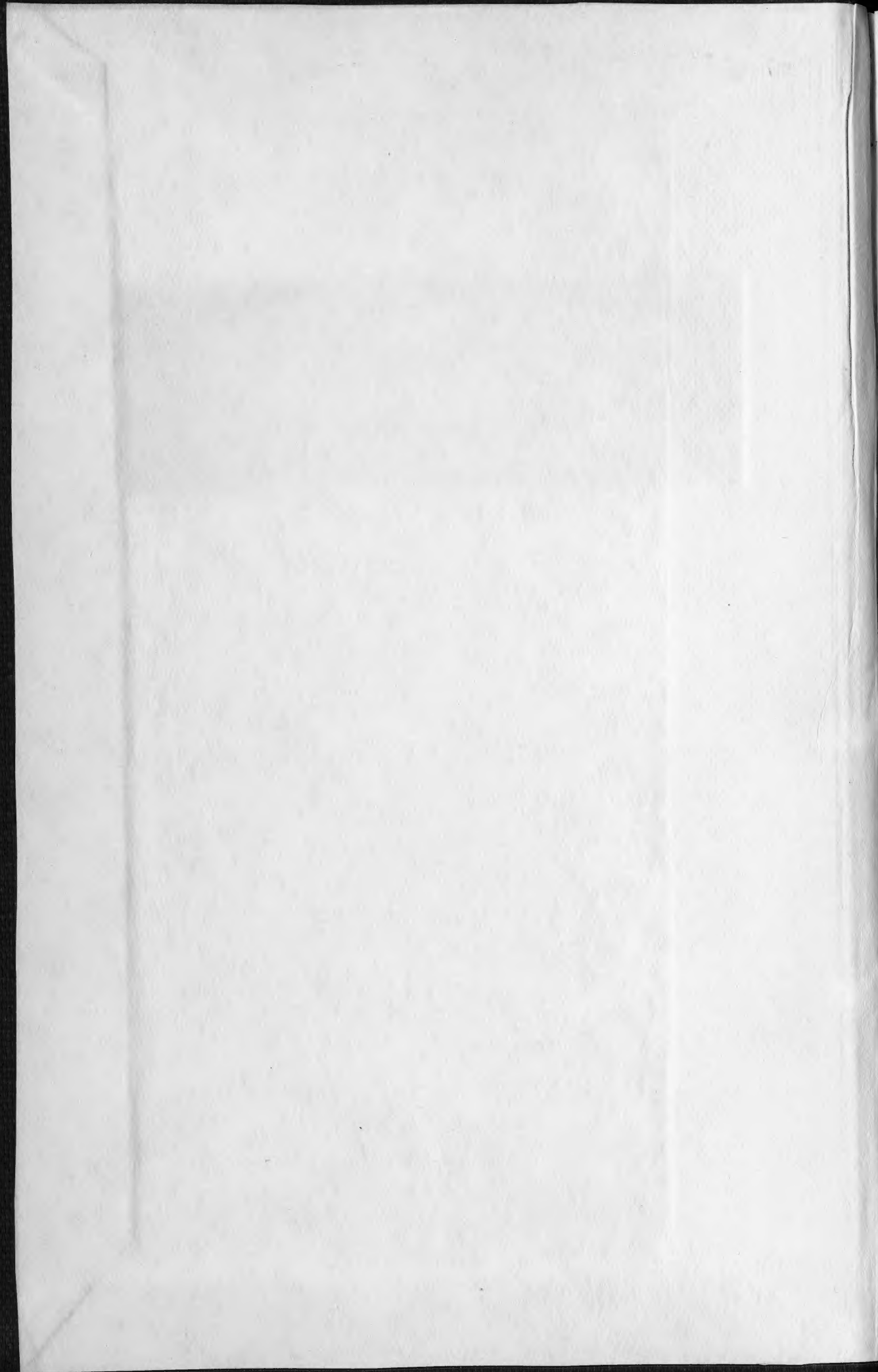


GORMAN 1-317 1902

COLLE



W. W. Gorman
LAKE ILIADNA, ALASKA
JUNE 19 to SEPT. 12, 1902.

R. = Rare
 S. or Not ab. = Scarce or Not abundant
 f. ab. = Fairly abundant
 Ab. = Abundant
 V. ab. = Very Abundant
 Com. = Common - i.e., Occurring nearly every-
 where in the region -
 (K) = Korean
 (A) = Aleut
 (R) = Russian

LIST OF PLANTS COLLECTED IN
 LAKE ILIATNA REGION -

DATE	NO.	NAME	OK.
JUNE 19	1	<i>Rubus stellatus</i> Smith Rocky slopes Ab. Open woods & sandy shores	
		(K) = Ung-Koothl Fruit is eaten both raw & stewed. 8/2/02. Saw patches of this berry still in bloom near Kejitt to day -	
"	2	<i>Vaccinium vitis-Idaea</i> L. Rocky slopes Ab. Open woods & tundra	OK
		(K) = Hing-ah-goh (thoon-ah) Fruit is eaten raw, stewed & in the absence of sugar it is cooked with lard or grease <i>Vaccinium vitis-idaea</i> L.	
"	3	<i>Spiraea betulifolia</i> Pall. Rocky slopes V. ab. Open woods, shores & river banks (K) = Ung-guth-lah <i>Spiraea betulifolia</i> Pall.	
"	4	<i>Trientalis arctica</i> Fisch. Mossy glades & open woods Com. (K) = Thoon-thal-litz-ä <i>Trientalis europaea arctica</i> (Fisch.) Ledeb.	

1902.

June 19

- 5 *Chamaenirion latifolium* (L.) Sweet
 v.ab. CK. banks Iliamna Bay OK.

(R) = Tsul-bun-ā

Follows shores, beaches & stream banks

- " 6 *Cardamine*

CK. banks

Iliamna Bay

f.ab. (R) = Knol-nik-ā

Arabis lyrata occidentalis Wats.

- " 7 *Cerastium arvense* var.

CK. banks

Iliamna Bay

Rachere (R) = Knil-hyock-ā

Arumaria macrocarpa Pursh.

- " 8 *Oxyria digyna* (L.) Campd. OK.

CK. banks

Iliamna Bay

f.ab. (R) = Nong-Kal-chu h-gah

~~The Korois do not eat this (Chief)~~

The leaves & young stems are eaten both raw & cooked and the dried mature stems are smoked in lieu of tobacco - (Ewamuff)

1902.

JUNE 19

- 9 *Papaver alpinum* L.

CK. banks

Iliamna Bay

f.ab. (R) = Lō-Kol-yoo-ee

Papaver nudicaule L.

- " 10 *Silene acaulis*, var.

CK. banks & rocky crevices slopes

Iliamna Bay

f.ab. (R) = Khuk-thā

Silene acaulis L.

JUNE 20

- 11 *Rorippa palustris* (L.) Bess.

Stream banks & shores

Iliamna Bay

f.ab. (R) = Lō-ee-kul-yash-ā

Livid when young

Barbarea americana Rydb.

- " 12 *Chrysanthemum arcticum* L. OK.

Sea beaches, submerged at high tide

Also occurs on rocky slopes Iliamna Bay

Is somewhat heliotropic

Not ab. (R) = Thoos-sthan-Koo-dhool-yā

1902

JUNE 20

- 13 *Argentina Anserina* L. Rydb.
Sea beach, submersed at H.T. Hiamma Bay
Occurs also on stream banks
Com. (K) = Khol-nig-ā
Potentilla anserina L.

- " 14 *Plantago maritima* L. OK
Sea beach, submersed at H.T. Hiamma Bay
Com. (K) = Koth-noo-tlyoh-ā

- " 15 *Triglochin maritima* L. OK
Sea beach submersed at H.T. Hiamma Bay
f. ab. (K) = Klāw-zöö-āh

- " 16 *Romanzoffia Sitchensis* Bong. OK
CK. banks Hiamma Bay
Ab. (K) = Jan-jee-de-Koonah
Romanzoffia sitchensis Bong.

1902
June 20

- 17 *Saxipraga punctata* L.
CK. banks Hiamma Bay
Ab. (K) = Muh-Kindul-Koo-yea
Saxipraga nelsoniana Dou.

- " 18 *Poloniumium coeruleum* L.
CK. banks moist ground Hiamma Bay
Not ab. here
Ab. on route (K) = Thoot-nuh-thoot-yea

- " 19 *Viburnum pauciflorum* Poir. OK.
CK. banks moist ground Hiamma Bay
Ab. 1 to 4 ft. high. (K) = Too-sat-thoon
Fruit is eaten raw & boiled and sometimes put
up in seal oil for winter use.
Pith is removed from the straight branches & they are
then used for pipe stems by the Kenaes

- " 20 *Chrysosplenium alternifolium* L.
Mucky CK. banks Hiamma Bay
Not ab. (K) = Thoo-Kotz-tsok-ah
Chrysosplenium tetrandrum Fries.

1902

- JUNE 20 21 *Pedicularis*
Sandy ck. banks Iliamna Bay
f. ab. (K) = Wats - Kil - toots - a
Pedicularis verticillata L.
- " 21 22 *Saxifraga bronchialis*, L.
Sandy ck. banks Iliamna Bay
Not ab. (K) = Knil - hyoh - eh OK

- " 23 *Epilobium*
ck. banks Iliamna Bay
not ab. (K) = Koon - shoh - Koon - ah
Epilobium bekringianum Hausskn.

- " 24 *Angelica*
f. ab. ck. banks & open places Iliamna Bay
(K) = Knoch - ah - Kath - pah
Root = Ool - snuk - Kits - na
The root is chewed & then held in the mouth
in lieu of tobacco
Coelopleurum gmelini (Dc.) Ledeb.

OK

- June 21 25 *Ammodenia peptoides* (L.) Rupr.
Sea beach submod. at H.T. Iliamna B.
Is greedily eaten by horses
(K) = Kon - ooz - Kuth - a
Ammodenia peptoides major (Hook.) Wight.

- " 26 *Ledum palustre*, L. OK
Open woods & marshes S/L. to 1000 ft.
Ab. (K) = Kluk - Ki - y

- " 27 *Heracleum lanatum*, Michx. OK
Open woods Iliamna Bay
In bloom at 1000 ft. not yet out at S/L.
f. ab. (K) = Khais
Is much eaten raw

- " 28 *Alsine longipes* (Goldie) Coville.
Sandy ck. banks Iliamna Bay
Not ab. (K) = Knil - hyoh - eh OK

1902

JUNE

21

29 *Phlegopteris Phlegopteris* (L.) Underw.

Ab. Open woods S/L to 1500 ft. Iliamna Bay

(R) = Uh-thoon-ah

Phlegopteris phlegopteris (L.)
Underw.

"

30 *Dryopteris spinulosa* (L.) Underw.

Ab. Open woods S/L to 1000 ft. Iliamna Bay

(R) = Uh-thoon-ah

OK

"

31 *Alnus tenuifolia* Nutt. ?Slopes & mtn. sides - S/L to ft.
Very ab. 2 to 8 in. Diam. Iliamna BayMuch infested by a moth grub that
destroys the leaves

(R) = Khoon-kee-ah-thoon-ah

Alnus sinuata (Regel) Rydberg.

"

32 *Geranium erianthum* DC.

Rocky cliffs & open woods Iliamna Bay

Not ab. on Bay - very ab. in Interior

(R) = Chud-chud-eh

OK

OK

1902

JUNE

22

33 *Eriophorum angustifolium* Roth

sphag. marshes. Iliamna Bay

Not ab. here f. ab. on trail inside Pass

(R) = Kun-jee-thah

Near *E. Virginicum* but has longer bristles

"

34 *Picea Canadensis* (L.) B.S.P.

In sphag. marsh Iliamna Bay

Only 4 decaespitate species 1 1/2 to 2 ft. high and
almost dead were observed here.At Iliamna Pt. 3 spec. were seen, the tallest
only 26 1/2 in. highAt Innerskin Bay 8 mbs. distant a tree
13 1/2 in. in diam. was 165 years old.This was the prevailing tree along the route
until the mouth of Abitona R. was reached
on 7/23, when *P. Mariana* became the pre-
ailing tree. (R) = Ellh

Cone = Kloo-paesh-ah

Sapling = Schwallah-Koo-yah

Buds = Blo-nya-Kool-yah

Roots = Ko-Kul-lash-ta

Picea canadensis (Mill.) B.S.P.

"

35 *Comarum palustre* L.

In ponds in sphag. marsh Iliamna Bay

Ab. but not yet in bloom

Obsd. in fire print on L. Iliamna on 7/17/02

(R) = Klin-ah-Koon-ah

OK

1902
JUNE 22

36 *Rumex occidentalis*
Ch. banks Iliamna Bay
Ab. (R) = Kosh-ā

It is eaten both raw & boiled
Rumex occidentalis Wats.

" 37 *Valeriana Sitchensis*, Bong. ?
Ch. banks moist ground Iliamna Bay
Not ab. on Bay very ab. inside
Fragrant (R) = Thsil-thool-thah
Valeriana capitata Pall.

" 38 *Cattha palustris*, L. ?
In ponds & Ch. banks Iliamna Bay
Not ab. (R) = Thlurr
Is eaten both raw & boiled
Cattha palustris asarifolia (L.)
Ruth.

" 39 *Betula glandulosa*, Michx.
In sphag. marsh Iliamna Bay
Prostrate not thrifty here
(R) = Ahhl-yees

" 40 *Betula Alaska*, Sargent
In sphag. marsh Iliamna Bay
Prostrate not thrifty here
(R) = Kutzy-ee-yah

1902

June 22

41 *Salix*
Prostrate in sphag. marsh Iliamna Bay
Ab. (R) = Ketch-ah-dhun

Salix fuscescens Anders.

" 42 *Salix Sitchensis*, Sargent
Open slopes & Ch. banks Iliamna Bay
Comm. Much infested by a moth grub that destroys
the leaves. Measured 1 spec. at Iliamna R. 9 mi.
in diam.
(R) = Tsal-twhish-ā

Salix alaxensis (Anders.) Coville.

" 43 *Montia*
Grassy Ch. banks Iliamna Bay
Rare (R) = Kith-ung-Koo-yah

Claytonia sarmentosa C. A. Mey.

" 44 *Cardamine bellidifolia*, L. OK
Sandy Ch. banks Iliamna Bay
Rare (R) = Bilyh-nah-Koo-thool-yah

1902.
JUNE 22

45 *Diapensia lapponica*, L.
Dry rocky slopes Iliamna Bay
f. ab. (K) = Khon-uz-Kuth-ah' OK

" 46 *Lycopodium acuminatum*, L.
In sphag. marshes Iliamna Bay
Ab. Thoot-nah-thoot-ya OK

" 47 *Saxastana odorata*, (L.) Scribn.
Rocky slopes & hillsides Iliamna Bay
Not ab. *Saxastana alpina* (Sw.) Scribn.

" 48 *Sedum roseum*, (L.) Scop.
Rocky cliffs & sphag. marshes Iliamna Bay
Ab. *Sedum frigidum* Rydb.

1902.

JUNE 23

49 *Rubus chamaemorus*, L. OK
In sphag. marshes Iliamna Bay
Not ab. herb ab. inside

Rubus chamaemorus L.

" 50 *Cornus Suecica*, L. OK
In sphag. marshes Iliamna Bay
Occur ab. in open woods inside
(K) = Ung-Kootl
Fruit is eaten raw only
Cornus suecica L.

" 51 *Cerastium*
Sandy OK. banks Iliamna Bay
f. ab. *Cerastium vulgatum* L.
Near *C. vulgatum*

" 52 *Primula*
Rocky slopes 800 ft. el. Jinkel-yash-Pass
f. ab. here
R. = Sweet-Kah
(K) = Ash-shaw-OK-wah
Flowers - Deep red, turning purple on drying.
Res. *P. cuneifolia*

Primula cuneifolia Ledeb.

1902

June 23 53 *Shepherdia campocarpifolia* (L.) D. Don.
Sandy woods. Kiamma River
f. ab. both outside & inside OK.

" 54 *Geum macrophyllum* Willd. OK
Open woods. Kiamma River
Occurs both outside & inside but not ab.

" 55 *Sambucus racemosa* L.
Sandy woods. Kiamma River
Open woods. Jinkal-yash Pass
Sambucus racemosa L.

" 56 *Calamagrostis*
Sandy st. banks. Kiamma River
f. ab.

Poa arctica V. Br.
This species wherever observed, was found to
have many of the seeds sprouting while the
plant was yet growing -
On further observation this sprouting appears
to be a fungoid growth of some kind -
m.w.g.

1902

June 24 57 *Anemone narcissiflora* L. OK
Rocky slopes. Jinkal-yash Pass
Not ab.

" 58 *Chamaecyparis procumbens* (L.) Kuntze.
Rocky slopes. Jinkal-yash Pass
Not ab.

Chamaecyparis procumbens (L.) Kuntze.

" 59 *Rubus spectabilis* Pursh OK.
Rocky slopes. Jinkal-yash Pass
Ab.

f. ab. on L. Clark ^{near Kge-jik River,} ~~along Potlatch River, side of~~
~~near Tana River, but not yet ripe.~~

June 25 60 *Pyrola rotundifolia* L. ?
Open woods. Kiamma River, Alaska
Kheuk-tha

Pyrola rotundifolia L.

1902
JUNE 25

61 *Rubus chamaemorus* L. OK
Open woods
Hiamma River
Fruit is eaten both raw & stewed

Rubus chamaemorus L.

62 *Menziesia urceolata*, Link.
Open woods
Hiamma River
Not collected
R = 12 years

Menziesia ferruginea Smith.

63 *Thalictrum sparsiflorum*, Turcz.
Open woods
Hiamma River
OK

64 *Asarum canadense*, DC. OK
Open woods
Hiamma River
R = 12 years

1902
JUNE 25

65 *Vaccinium*
Open woods & along Hiamma River
Fruit is eaten raw, stewed & cooked with
Sagum root

Vaccinium uliginosum L.

66 *Polygonum viviparum*, L. OK
Open woods & C.K. banks
Hiamma River

67 *Trisetum subspicatum*, Beauv.
C.K. banks
Hiamma River

Trisetum subspicatum (L.) Beauv.

68 *Populus balsamifera* L. OK
~~*trichocarpa*~~
C.K. and River bottoms
Hiamma R.
6 to 26 in. diam.

R = Snek or Snav. Leaves = Ktoon
Specimens of this tree were collected for *P. trichocarpa*
but a few days after collecting the capsules opened and
were found to be 2-valved, thus excluding it from that
species.

1902.

JUNE 26

69 *Picea Canadensis* (L.) B.S.P.
Slopes & hillsides Iliamna River

f. ab. 6 to 22 in. diam (sapling)

(R) = Ellh (green tree) or Churdell - lok-wa-too-nah

" Cone = Kloo-pesh-ah

" Buds = Blo-ee-ya-Kool-ya

" Roots = Ko-Kul-lash-ah. The roots are split & used for making baskets, lashings of all sorts etc.
Picea canadensis (Mill.) B.S.P." 70 *Betula Alaska*, Sargent
Slopes & hillsides Iliamna RiverAb. (R) = Kuss-ē-yah or Kuss-ī'-yah or Ket-si-ah
Wood is used for snow shoe frames, sleds, pipe bowls etc." 71 *Betula glandulosa*, Michx.
Marshes & water slopes Iliamna RiverWhen in marshes it is small leaved & prostrate...
When on hillsides & water slopes it is large leaved
3 to 12 or 15 ft. high x 1/2 to 2.55 in. in diam. but poorly pitted.

(R) = Ahtl-yees

Betula glandulosa rotundifolia (Spach) Regel.JUNE 27 72 *Fritillaria Kantschatcensis*, Ker.

Not ab. Open woods & river banks Iliamna River

The bulbs are sometimes eaten raw, but generally gathered & put into a soup or stew with meat fish etc.

(R) = Kan-ah-dlee.

Fritillaria kantschatcensis (L.)
Sawder

1902.

JUNE 27

73 *Rosa acicularis*, Lindl. OK.
Open woods Iliamna River

f. ab. (R) = Ung-Kootl-Kuk. Sometimes called

Hush - which = thorns

Seed capsules are eaten raw, boiled in water or cooked in a stew with meat etc.

" 74 *Elymus mollis*, Trin.v. ab. Sea beach & sandy riv. banks Iliamna River
(R) = Man-thu-thu'-sha*Elymus arenarius* L." 28 75 *Geranium erianthum*, DC. OK.
ab. Open woods Iliamna River

(like 64 but has pale pink flowers & bluish leaves)

(R) = Chah-chah-ee

When the plant has finished blooming the leaves are gathered, dried and used as a tea. The leaves are also pounded to cure wounds. The roots are eaten raw, and boiled as a remedy for various diseases, and a decoction is used as a remedy for inflammation of the eyes.

" " 76 *Rubus pedatus*, Smith OK.
f. ab. Sphagnum marshes Iliamna R.

2 20.

1902.

JUNE 28

77 *Lupinus*

Open woods

Iliamna R.

f. ab. (R) = Krim-thal-Kath-a

Lupinus nootkatensis Donn.

" 78 *Oxycoccus Oxycoccifolius* (L.) Macbr. OK
Sphagnum marshes Iliamna R.

f. ab. (R) = Smil-thu-thah

Fruit is eaten both raw & cooked

Oxycoccus oxycoccifolius (L.) Macbr. OK

Streptopus amplexifolius (L.) DC.

" 79 ~~*Vaccinium myrtillus* (L.) Mill.~~ OK
Open woods Iliamna R.

f. ab. (R) = Klitsch-Kah Chief says
sometimes eaten

JUNE 29

80 ~~*Taraxacum*~~ *lividum* (W. & A. Heller)
Open woods Iliamna R.

Rare *Taraxacum chamissonis* Greene

21.

Moschlingia lateriflora (L.) Fenzl.

1902.

JUNE 29

81 ~~*Cerastium Beringianum* (L.) DC.~~ OK

Ab. Open woods under spruce trees. Iliamna R.

" 82 *Empetrum nigrum* L. OK
Wtn. slopes & phag. marshes. Iliamna R.

Conv. Bushes are burnt as an incense
Fruit is eaten raw but not cooked, Fruit is
said to be beneficial in bronchial troubles.

(R) = Chin-too-nah

" 83 *Viola Langsdorffii* Fisch.

Open mossy woods & phag. Marshes. I. R.

f. ab. *Viola palustris* L.

" 84 *Lycopodium alpinum* L. OK

Open woods & Wtn. slopes. Iliamna R.

Not ab.

1902.

JUNE 29

85 *Sorbus sambucifolia* (C. & S.) Roem. OK
Open woods Iliamna R.Rare (R) = Muk-thil-chin-ā K's say
that the Russians eat the fruit.Fruit is partially cooked on hot rocks and
then eaten as a remedy in coughs, asthma,
hemorrhages etc.Branchlets are heated on hot rocks and
used to beat the body" 86 *Moneses uniflora* (L.) A. Gray OK
Open mossy woods Iliamna R.
Not ab.JUNE 30 87 *Lippia orechis*
~~*Habenaria*~~
Open mossy woods Iliamna River

Rare (R) = Nan-too'-nah

Not the same as 193. the leaf is longer and
the roots are fleshy -*Lysichiton obtusata* (Pursh) Rydb." 88 *Anemone*
Rare Open woods Iliamna River
Anemone richardsoni Hook.

1902.

JUNE 30

89 *Spis setosa* Pall. OK
Sphag. marshes foot groundAb. (R) = Tik-nil-ah-kol-ah-jit-lah Iliamna River
K's sometimes chew the root but say it is not
like pepper." 90 *Salix*
Open woods Tinkel-yash Trail
Com. (R) = Thoon-thal-kē'-ah" 91 *Pedicularis*
Sphag. marshes Tinkel-yash Trail
Not ab. *Pedicularis euphrasoides* Steph." 92 *Andromeda polifolia* L. OK
f. ab. Sphag. marshes Tinkel-yash Trail
(R) = Kik-i'-ahBranchlets and leaves are boiled for one
hour and the decoction drunk for coughs
& colds*Andromeda polifolia* L.

24.

1902.
JUNE 30

93 *Mnemonanthus trifoliata*, L. OK
In sb hagenus marshes Jinkel-yash Trail
Not ab. (R) = Kull-toots-ah

" 94 *Potentilla fruticosa*, (L.) Rydb.
Moist ground & K. banks Jinkel-yash Trail.
Ab. (R) = Kuh-shook-thah
Bark is scraped & applied raw to cuts & wounds
and a decoction of the bark is drunk as a
remedy for headaches & biliousness.
Potentilla fruticosa L.

" 95 *Echinopanax horridum*, (Smith) Dec. & Rydb.
Moist slopes Jinkel-yash Trail
Not ab. (R) = Hush-Karr OK
The branchlets are burnt & the ashes applied
to cuts & wounds.

JULY 2 96 *Aconitum columbianum*, Nutt.
Open woods moist slopes Indian Village
[No-chuk-tol-lit-roo]
(R) = Tan-jee-dee-yil-Kad-dā
Aconitum delphinifolium Db.

25.

1902.
July 3

97 *Arnica*
Mossy slopes Jinkel-yash Lake
Not ab. *Arnica lessingii* (Torr. & Gray.)
Greene.

" 98 *Juniperus nana*, Willd. OK
Dry rocky bluff Hianna Bay
Not ab.
Seen also at Hianna Pt., Lake Hianna
Lake Clark
(R) = Chin-tön-ah

" 99 *Poa*
Sea beach Hianna Bay
f. ab. *Poa glumaris* Presl.

JULY 4 100 *Pedicularis*
Open rocky bluffs Hianna Point
f. ab. *Pedicularis lanata* Willd.

1902.

- JULY 4 101 *Campanula lasiocarpa*, Cham. OK
 Open rocky slopes Hiamma Pt.
 Not ab. Has from 1 to 5 flowers on a single stem
 but is mostly single flowered.

- " 5 102 *Pneumonia maritima* (L.) Hill OK
 Shingly beaches Hiamma Pt.
 Not ab.

- " " 103 *Lathyrus maritimus* (L.) Pige. OK
~~Vicia~~ crassy beaches Hiamma Pt.
 Not ab.
 Flowers red to purplish red, turning purple
 in drying.

- " " 104 *Tofieldia*
 Open rocky cliffs & alpine slopes - S/L to 2000 ft.
 f. ab. Hiamma Point

Tofieldia coccinea Richards.

1902.

- JULY 5 105 *Arctostaphylos alpina*, (L.) Niedenzow OK
 Open rocky slopes Hiamma Point
 Corv.

- " 106 *Salix*
 Open rocky & alpine slopes Hiamma Point
 f. ab.
Salix phlebophylla Anders.

- JULY 6 107 *Potentilla villosa*, L. OK
 Dry rocky cliffs Hiamma Pt.
 f. ab.
Potentilla villosa Sal.

- " 108 *Artemisia borealis*, Pall.
 Open rocky slopes Hiamma Point
Artemisia chamissoniana Bess.

28.
1902.
JULY 6

109 *Phlegopteris Dryopteris* (L.) Fee OK
Open woods among alders. Iliamna Pt.
Ab. *Phlegopteris dryopteris* (L.) Fee

" 110 *Rhododendron*
Open rocky slopes Iliamna Pt.
Not ab. R = Chitl
Flowers - Red, turning purple on drying.

Rhododendron kamtschaticum
Pall.

" 111
Open rocky slopes among *Empetrum* *Ledum*
Not ab. Iliamna Point

" 7 112 *Salix*
Open rocky talpine slopes Iliamna Point
Salix arctica Pallas.

29.

1902.

JULY 7 113 *Atriplex littoralis* (L.) ?
Sea beach Iliamna Point
f. ab. *Atriplex gmelini* L. S. Meyer

JULY 8 114 *Ligusticum Scoticum* L. OK
Grassy beaches Iliamna Point
f. ab. *Ligusticum scoticum* L.

" 115 *Chamaenerion angustifolium* (L.) Scop. OK
Open rocky slopes Iliamna Point
v. ab. The most ubiquitous and abundant plant
in the whole region traversed. Grass sometimes
5 ft. high, with foliage $\frac{3}{4}$ in wide in rich moist
soil while on the semi-barren tundra it occurs about
1 ft. high, short spiked with foliage $\frac{1}{4}$ in. wide.
The most most abundant plants are *Empetrum*
Vaccinium (No. 118.) *Ledum*

(R) = Nootl-throol-yah. The dry stems are
boiled & the decoction drunk as a tea. The dry hollow
stems are also smoked in lieu of tobacco.

JULY 9 116 *Ribes laxiflorum*, Pursh. OK
Open rocky slopes Iliamna Point
f. ab. (R) = Chull-tung-ul-thillah.

1902.

- JULY 10 117 *Polygonum*
Open rocky slopes Iliamna Pt.
Not ab.
This species is somewhat different & does not appear to be
P. viviparum. *Polygonum viviparum* L.

- " 118 *Vaccinium ovalifolium*, Smith OK
Open rocky slopes Iliamna Point
Not ab. here. Fruit is nearly ripe at this point
already and is large & of fine flavor.
D = Kuri-sah

- " 119 *Aruncus aruncus* (L.) Karst. OK
Open woods & grassy slopes Iliamna Pt.
Aruncus aruncus (L.) Karst.

- JULY 12 120 *Hieracium glabra*, Willd. OK
~~*puberulum*~~
Rocky cliffs & ch. banks Iliamna Pt.
Com.

1902.

- JULY 13 121 *Galium triflorum* Michx.
Mucky ch. banks Iliamna Bay
Rare *Galium trifidum subbiflorum*
Wiegand

- " 122 *Alisma borealis* (Bigel.) Britton OK
Mucky ch. banks Iliamna Bay
Not ab.

- " 123 *Montia*
Mucky ch. banks Iliamna Bay
Rare Very fleshy succulent on collecting
but shriveling greatly in drying -
Claytonia Chamissoi Ledeb.

- " 124 *Galium boreale*, L. OK
Open woods & glades Iliamna River
Com.
The most abundant & characteristic plant of
the Interior. This plant, *Allium*
Dasiphora fruticosa, *Rosa acicularis*, *Hedysarum*
Americanum,
may all be considered characteristic & typical of
the Interior flora.

1902.
JULY 14 125 ~~Stachys~~
Shady woods
f. ab. Occurs on Iliamna R., I. Iliamna, Nogahelup
R., L. Clark
(Is rather succulent & hard to cure properly)
Rhinanthus crista-galli L.

" 126 ~~Sanguisorba~~ *Sitchensis*, C. A. Meyer.
Shady woods & grassy glades. Iliamna R.
Ab. *Sanguisorba latifolia* (Hook.)
Coville.

" 127 *Arnica*
Open woods
Not ab. *Arnica chamissonis* Less.
Iliamna R.

" 128 ~~Chrysopsis~~ *Solidago*
Open woods
Not ab. *Solidago multiradiata* Ait.
Iliamna R.

1902.
JULY 14 129 *Betula*
Grassy slopes
Iliamna River
Ab. ? Is this *B. glandulosa*

" 130 *Pyrola secunda*, L. OK
Open woods & grassy slopes Iliamna River
Ab.

" 131 *Veratrum viride*, Ait.
Open woods Iliamna River
Ab. (K) = Chish-Kin-nah The root is boiled
10 or 15 minutes and the decoction used as an
emetic. The plant is much infested by a
gnat or small caterpillar & is hard to see -
Veratrum eschscholtzii (Roem & Sch.)
Gray.

" 132 *Pyrola picta*, Spruth ?
Open woods & grassy glades. Iliamna R.
Not ab. *Pyrola rotundifolia* L.

Mac M.

1902.
JULY 14 133 *Gyrostachys Romanzoffiana* (Cham.)
Moist woods & hillsides in sphag. swamps
Not ab. here. Niamna River

Gyrostachys Romanzoffiana (Cham.)
Mac M.

" 134 *Vaccinium ovalifolium*, Smith
Open woods Niamna River
Not ab. here. Fruit is excellent & nearly ripe

(R) = Kni-sah

Fruit is eaten raw & stewed and in the absence
of sugar is boiled with meat & grass etc.
MTEE KOWLUH says this fruit is very abundant
at Kodiak and that there it is sometimes sun-
dried in addition to being eaten raw & boiled.

JULY 15

135

(5 Moss)

Ab. Hillsides in open woods Niamna River

JULY 16 136 *Calamagrostis*

Open woods, glades, lake & stream banks
V. ab. Niamna River
(R) = Kih-cheni

This is the most valuable grass in the whole region

Calamagrostis canadensis (Mx.) Beauv.

1902.

JULY 17

137 Aster

Sandy beaches & rocky shores. Lake Niamna

Ab.

Aster sibiricus L.

" 138 *Parnassia Kotzebuei*, C. & S.
Sandy beaches & rocky shores. L. Niamna

Parnassia Kotzebuei Cham. & Schlecht.

" 139 *Salix Sitchensis*, Sanson
Grassy glades & open tundra. L. Niamna
6 in. to 5 ft high, sometimes prostrate on tundra.
Is greedily eaten by the pack-horses.

(R) = Kith-on-thil-koo-yah

Salix glauca L.

" 140 Poa

Creek & pond banks, usually growing in water
L. Niamna

Colpodium fulvum Griseb.

JULY 17 141 *Ranunculus reptans*, L. OK
 Along creeks & dried ponds. L. Niamna
Not ab.

" 142 *Sparganium angustifolium*, Fries.
~~*L. Niamna*~~
 In muddy ponds L. Niamna
Not ab. *Sparganium hyperboreum* Laest.

" 143 *Hippuris tetraphylla*, L.f.
~~*Hippuris vulgaris*~~
 In muddy ponds L. Niamna
Ab. *Hippuris vulgaris* L.

" 144 *Roripa*
 Submerged in lake L. Niamna
Roripa palustris (L.) Bess.

JULY 17 146 *Potentilla*
 Sandy & rocky beaches. Olds. in L. Niamna
f. ab. *Potentilla monspeliensis* L.

" 145 *Epilobium*
 Grassy shores Lake Niamna
f. ab. *Epilobium palustre* L.

" 147 *Cheiranthus cheiranthoides* (L.) Heller
 Sandy & rocky beaches L. Niamna
Ab. *Crysinum cheiranthoides* L.

" 148 *Polonium humile* Willd.? OK
 (Ill. scented) Sandy beaches L. Niamna
Ab.

OK

1902.
JULY 18 149 *Rubus chamaemorus* (fruit) L.
v. ab. Open Tundra Lake Iliamna
(K) =

The Tundra is now dotted pink in patches with the ripe fruit of this berry. The taste is slightly acid & much superior to the same fruit in S.E. Alaska. After flowering the sepals close the fruit tightly so that the berry is fully ripe when they again open out as they did in flowering. If allowed to get too ripe the fruit loses in flavor & turns a light yellow in color.

Rubus chamaemorus L.

" 150 *Saxifraga reflexa*, Hook.
Rocky slopes & bluffs L. Iliamna
Rare here *Saxifraga nivalis* L.

" 151 *Saxifraga*
W. rocky slopes & bluffs L. Iliamna
Rare here *Saxifraga rivularis* L.

" 152 *Mimulus laevis* (L.) Sims ?
About Springs West shore L. Iliamna
Ab. *Mimulus guttatus* DC.

1902.
July 18 153 *Alnus longifolia* (Muhl.) Britton
f. ab. About Springs ~~West~~ ^{N.} shore of L. Iliamna
Alnus borealis (Bigel.) Britton

" 154 *Epilobium*
Ab. About Springs ~~West~~ ^{N.} shore L. Iliamna
Epilobium bongardi Hausskn.

" 155 *Cornus suecica*, L. OK
f. ab. Massy shores L. Iliamna
Cold, to show metamorphosis of leaves into
sp. involucre bracts.
(K) = Ung-Kootl. Fruit is eaten raw only
Cornus suecica L.

" *Picea canadensis* (L.) B.S.P.
The tundra about a great part of Lake Iliamna particularly the ^{N.} west shore, while apparently treeless, is found on closer examination to be fairly well dotted with this species in a perfectly prostrate form. The trees or rather saplings do not form groves at present but I think it is only a question of time until cone-forming individuals get a footing and the species becomes well established about the lake. At present it has become fairly well established on the east side and about half way down the west side.

Picea canadensis (Mill.) B.S.P.

40.
1902.
JULY 19

Road House Camp. - I am a month on the expedition this morning and have collected 155 Numbers to date, of which probably 130 are separate species.

In crossing the first 3 miles of the Nogginny trail last night, about 2 miles were tundra and 1 mile open woodland. The chief species seen on the tundra were
Redum latifolium, *Eriophorum vaginatum*
Vaccinium vitis-idaea, Vac (#65. & 207)
Arctostaphylos alpinus, *Andromeda polifolia*
Salix Sitcheensis, *Salix*
Betula glandulosa,

" 156 *Myrica Gale*, L. OK
Margins of ponds & ketets. Near Nogginny R.
Ab. First place this shrub was seen on trip

Myrica gale L.

" 157 *Ranunculus reptans*, L. OK
Margins of Ponds Near Nogginny River
Not ab.

" 158 *Tofieldia palustris*, Huds. OK
Tundra & Phag Marshes. Nogginny Trail
Not ab.

41.

1902.

July 19 159 *Gyrostachys Romanzoffiana*, (Cham.) Macbr. OK
Moist tundra & Phag. Marshes
f. ab. Nogginny Trail

Gyrostachys romanzoffiana (Cham.) Macbr.

" 160 *Linnaea Americana*, Forbes OK
Moist woods Nogginny Trail
Ab. *Linnaea americana* Forbes

" 161 *Polygonum acutiflorum* ? (White) OK
Grassy slopes Nogginny Trail
Rare

JULY 20 162 *Chamaenerion angustifolium*, (L.) Scop. OK
Open tundra Nogginny Trail
Ab. Showing stunted appearance of plants on tundra which is here somewhat dry.
(K) = Nil-throl-Kah (or -Klah)
The dry stems are boiled & the decoction drunk as a tea. The dry hollow stems are also smoked in lieu of tobacco.

" 163 *Arctica alpina*, (L.) Olin OK
Open tundra Nogginny Trail
Not ab. *Arctica obtusifolia* Lessing.

1902.

JULY 20

- 164 *Lupinus arcticus*, Wats. Nogaheling Trail
 Open tundra
Lupinus nootkatensis unalascensis
 Wats.

JULY 21

165 *Tragacanthus*

Sandy slopes

f. ab.

Nogaheling R. Rapids ^{Yel.}*Tragacanthus gracilis* St. Nelson

- " 166 *Dryas octopetala*, L. OK
 Gravelly hills Nogaheling R. near Rapids

" 167 *Pedicularis*

Dried ponds, Nogaheling R. near L. Clark

not ab.

Pedicularis parviflora J. E. Smith

JULY 22

168 *Astragalus*

Sandy beaches

Foot of Lake Clark

Astragalus alpinus L.

1902.

JULY 22

- 169 *Vicia Americana*, Muhl. Foot of L. Clark
 Sandy beaches
 f. ab. *Lathyrus palustris* L.

" 170 *Mertensia* sp.

Sandy shores

f. ab.

Foot of L. Clark

Mertensia septentrionalis Wight.

JULY 23

171 *Vaccinium*

Open tundra

Low brush

The Narrows Foot of L. Clark

Vaccinium uliginosum L.

- " 172 *Boschniakia glabra*, C. A. Meyer OK
 Sandy shores tundra Foot of Lake Clark

- " 173 *Parnassia palustris* L. OK
 Shores of ponds partly submerged Ft. of L. Clark

1902.
JULY 23 174 *Comandra lindera* Richards.
Open woods & dry slopes ^{mouth of} Above Chulitna River
Lake Clark

" 175 *Intundra* ^{richer} open woods L. Clark near mouth of Chulitna River
Rare.

" 176 *Woodsia*
dry rocky cliffs L. Clark, near mouth of Chulitna River
Not ab.
(R) = Chool-yin-thoonah.
Woodsia ilvensis (L.) R. Br.

" 177 *Perminum repens* (L.) Salisb. OK
Grassy woods L. Clark near mouth of Chulitna River
Rare

JULY 23 178 *Picea Mariana* (Mill.) B.S.P. OK
slopes & hillsides. L. Clark near mouth of Chulitna River
V. ab.

This tree was first observed on Noyahling River a little below the foot of L. Clark. It is the prevailing tree. I found one specimen here 16-87 in. in diam. x 57 ft. high. Almost all the individuals examined were well covered with cones which as usual in this species were more or less persistent and massed near the top.

(R) = Naktl-yoon,

Picea mariana (Mill.) B.S.P.

JULY 24 179 *Bupleurum* ~~*americanum*~~ *Americanum* O.R. OK
Rocky cliffs. Near mouth of Chulitna R.
Not ab. L. Clark
(R) = Kol-Kuth-ā',

Bupleurum americanum
Coulter & Rose.

" 180 *Draba aurea* Vahl. OK
Rocky cliffs. L. Clark above mouth of Chulitna River
Yol. Craig

" 181 *Potentilla*?
Rocky cliffs. West side Lake Clark
(R) = No-Kut-thani-Kuth-ini

Potentilla pennsylvanica strigosa
Pursh.

July 24 182 *Dasiphora fruticosa* (L.) Rydb.
 Dry rocky cliffs. West side Lake Clark
 Not ab. Cold. to show dry habitat small leaves.
 R = Tsal-bun-ā
Potentilla fruticosa L.

" 183 *Drosera rotundifolia* L. OK
 Margins of ponds. West side L. Clark
 f. ab.

" 184 *Drosera longifolia* L. OK
 In slippy ponds. West side Lake Clark
 f. ab.

" 185 *Alnus tenuifolia* Nutt. ?
 Dry rocky slopes West side L. Clark
 Ab. R = Kung-Kuh-yah
Alnus alnobetula (Ehrh.) K. Koch.

July 25 186 *Senecio Balsamitae* Muhl.
 Dry rocky slopes. West side L. Clark
 Not ab. 'Hoh-thung-giké'-Kuth-ā
Senecio resedifolius Less.

1902.

July 25 187 *Tragallus* Whit. flowered
 Dry rocky cliffs. W. side Lake Clark
 f. ab. R = Tsal-bun-ā-Kuth-an
 The leaves are made into a poultice with hot water and applied to painful knees or sore throat also to cuts & wounds.

Tragallus gracilis St. Nelson.

" 188 *Hedysarum Americanum* (Mx.) Britton
 Sandy stream Banks. W. side L. Clark
 f. ab. R = Kee-lah Roots are eaten raw, boiled, sometimes cooked with meat etc.
 This is one of the staple vegetable foods of the natives (both Kruis & A. Vents) in this region.
 The dried roots are ground and fried (boiled) to make a tea.

Hedysarum americanum (Michx.) Britt.

" 189 *Artemisia vulgaris* v. *Tilesii* Ledeb. OK
 Stream banks & moist ground. Kee-jik Village
 f. ab. R = No-Kul-than Lake Clark
 K's say the bear is fond of the roots of this plant & digs it up to get them.
Artemisia Tilesii Ledeb.

July 26 190 *Conioselinum Gmelini* (C. & R.) C. & R. ?
 Sandy Ch. & Lake banks. W. side L. Clark
 (10 miles from head)
Conioselinum gmelini (Cham. & Schlecht.) Coult. & Rose.

1902^{re}

July 26

191 *Ribes rubrum*, L.

OK

Rocky slopes & open woods. Ildo in L. Clark
 f. ab. but not at all well fruited. 12 miles p. head

(R) = Chulld-ung-ul-thillah

[Tyoonok] = Noon-uz-kuth-a' Thoonah

Fruit is eaten raw, stewed, cooked with other
 fruit. Sometimes with meat &c.

" 192 *Rubus strigosus* Michx. OK
 Not ab. Rocky slopes Ildo, in L. Clark

(R) = Noo-yah-kut-lah

Fruit is eaten, raw, stewed & boiled with meat
 fish etc.

" 193 *Lipnorchis*
~~*Artemisia*~~

In masses of *Empetrum*. Hd. of L. Clark

Rare (R) = Wo2-gilt-toots-ah

Not the same as No. 87. - The leaf is smaller
 and the roots firm & ligneous - ~~newly~~

(477) *Lysichiton obtusata* (Pursh.) Rydb.

" 194 *Perovskia repens* (L.) Salisb. OK

In masses of *Empetrum*. Hd. of L. Clark

Rare

July 26 195 *Pyrola minor*, L.

f. ab. For beds of *Empetrum* Hd. of L. Clark
 (R) = Nun-chirrah

Pyrola secunda L.

1902^{re}

July 26

196 *Salix*

Sandy lake banks. W. side Hd. of L. Clark
 Not ab. Tree 8 to 15 ft. high

(R) = Uh-sna-j-kuth-an

(Rus) = Al-for-nak

Salix nuttallii Sargent.

July 27

197 *Allium sibiricum*, L.

OK

Sandy stream bks. W. side Hd. of L. Clark

Not ab. (R) = Huh-thunl-prik-ah

Both stems & bulbs are eaten raw & cooked. They are
 also cultivated by the K's. The bulbs are sometimes
 gathered for winter use.

Allium sibiricum L.

" 198 *Artemisia vermouthiana* Wats.

dry rocky cliffs. Hd. of L. Clark

Not ab. (R) = Nun-thin-iz,

Artemisia arctica Stev.

" 199 *Salix*

Klika-killa

Sand bars & sandy bks. ~~Sitting~~ river W. side
 Hd. of Lake Clark

(R) Trees = Sul-chish-ah,

Leaves = Kith-oon-thil-ki-a,

Arms = Kol-lul-uk-ah,

Salix alaxensis (Tuckerm.) Coville

" 200 *Festuca rubra* v. Klika-killa

Sand bars & sandy bks. ~~Sitting~~ river W. side
 Hd. of L. Clark

(R) = Kuh-chun

This grass is used for insides in umklucks, to hatch
 caches, igloos etc.

Festuca rubra L.

1902.

JULY 28

201 *Campanula lasiocarpa* Cham. OK
 Very rocky slopes 1500 ft. above sea level
 Hd. of L. Clark

f.ab. The only spot in which this plant was
 found even fairly abundant.

" 202 *Panmassia palustris* L. OK
 Mossy borders of lagoons. Hd. of L. Clark
f.ab. (R) = Kuh-chun-chill-lah

" 203 *Eupetrum nigrum* L. OK
v.ab. & well { Open rocky slopes 1500 ft. above S/L.
fructed { Not in *opshagnum*
 W. side Hd. of L. Clark
 (R) = Kuk-Kozh'-nah Thoon-ah
 Fruit is eaten raw, stewed & boiled with meat etc.
 Branchlets & leaves are chewed in lieu of Tobacco.
 The raw fruit is said to be beneficial in hoarseness
 & bronchial troubles.
 The bushes & branchlets are burnt as an incense on
 festive occasions.

" 204 *Pedicularis*
 Open rocky slopes 1500 ft. above sea level
 Hd. of Lake Clark
Not ab. Now passing into fruit
 (R) = Kin-dhaj-Kuth-ā

Pedicularis euphrasiodes Steph.

1902.

JULY 28

205 *Aconitum delphinifolium* DC. OK
 Grassy slopes 1500 ft. above sea level
 W. side Hd. of Lake Clark

Ab. (R) = Jan-jee-dee-yil-Kuth-ā
 The leaves are dried in Autumn & used in lieu
 of tea.

" 206 *Phleum alpinum* L. OK
 Open mossy slopes 1500 ft. above S/L.
Not ab. W. side Hd. of L. Clark
 (R) = Kuh-chung-Kuth-in
 Heads = Blo-yuk-thā

" 207 *Vaccinium* low bush
 Open rocky slopes 1000 to 1500 ft. above S/L.
v.ab. W. side Hd. of L. Clark
 (R) = Tsik-ah-Kah-Thoon-ah
 Fruit is eaten raw, stewed & sometimes boiled
 with salmon por (Sockeye) meat etc.

Vaccinium uliginosum L.

" 208 *Actaea arguta* Nutt.
 Moist woods 100 to 600 ft. above S/L.
f.ab. W. side Hd. of Lake Clark
 (R) = Chah-toon-grek-ah
 The fruit & stems are well boiled in water and
 doses of the decoction drunk as a remedy for
 chills

Actaea rubra (Rit.) Wied.

1902

JULY 28 209 *Festuca rubra* V.
 f. ab. Sandy shores W. side Hd. of L. Clark
Festuca rubra L.

" 210 *Festuca*
 f. ab. Sandy shores W. side Hd. of L. Clark
 (K) = Tsil-thrall-ghun-a
Bromus pacificus Shear.

" 211 *Boschniakia glabra*, C. A. Meyer OK
 Open woods & open rocky slopes - S/L to 2000
 ft. - Parasitic on roots of *Alnus*, *Vac.*
Arctostaphylos alpinus & *Picea Canadensis*.
 (K) = Schwölla W. side Hd. of L. Clark

JULY 29 212 *Hippuris vulgaris* L. OK
 f. ab. In ponds & lagoons. W. side Hd. of L. Clark
 Showing appearance of plant when grown in deep
 muddy ponds.

" 213 *Picea Canadensis* (L.) B. S. P.
 Open flats & slopes. W. side Hd. of L. Clark.
 Measured 2 trees, the largest I could find, on
 grassy slopes W. side Hd. of L. Clark. One proved to
 be 18 and the other 25 in. in diam. Specs. taken
 from a tree 126 years old, 56 ft. high by 12½ in.
Picea canadensis (Mill.) B. S. P.

(No. 213) Tree = Ellh, Roots = Ko-Kul-lash'-a 53.
 Cone = Kloo-pash'-ah
 Sapling = Schwolla-Koo-yah
 Bud = Bl-oo-yah-Kool-yah

diameter. This is the prevailing conifer
 all about L. Clark except a small tract
 near the mouth of Chulitna R. where
P. Mariana is the prevailing tree.
 7/31. Measured & sketched a small tree of *P.*
Canadensis on E. side, Hd. of L. Clark
 70 yrs. old, 30^{ft} high by 30^{ft} in diameter.
 Soil a sandy creek delta.

The fresh branchlets are boiled for our food or more and
 small doses of the decoction drunk as a remedy for coughs
 colds etc. The fine roots are gathered & being split are
 used to make baskets, lashings, etc.

JULY 29 214 *Utricularia*
 f. ab. In muddy ponds & lagoons. W. side Hd. of L. Clark
Utricularia vulgaris L.

" 215 *Mockringia lateriflora* (L.) Fenzl. OK
 (5) Several plants collected during a
 walk up Canyon water course, E. side
 Hd. of L. Clark
 Not ab.

" 216 *Senecio subnudus*, DC. ?
 Rare W. side rocky cliffs. Canyon E. side Hd. of L. C.
Senecio resedifolius Less.

1902.

JULY 29

217

Primula

Dry rocky cliffs, Canyon E. Side

Rare

Hd. of Lake Clark

Androsace chamaejasme Hook." 218 *Saxifraga*

Dry rocky cliffs, Canyon E. Side

Rare

Hd. of L. Clark

Probably same as No. 151.

Saxifraga rivularis L." 219 *Viola biflora*, L.

Dry rocky cliffs, Canyon E. Side

Rare

Hd. of Lake Clark

Viola glabella Nutt.

JULY 30

220

*Calamagrostis*Ab.

Slopes & hill sides in open woods E. Side

Hd. of Lake Clark

Calamagrostis canadensis (Mx.) Beauv." 221 *Poa*

Sandy slopes of rock slide E. Side

f. Ab.

Hd. of Lake Clark

Poa pratensis L.

1902.

JULY 30

222

Calamagrostis

Open woods & hill sides, E. Side

Ab.

Hd. of Lake Clark

Calamagrostis langsdorfii Trin.

" 223

Rubus strigosus, Michx.Ab. here

Open woods E. Side

Hd. of Lake Clark

" 224 *Hypopodium amoenum*, L.Ab.

Sphagnum woods, E. Side, Hd. of L. Clark

This is the chief *hypopodium* here

" 225

Elymus

Sandy lake shores. Hd. of Lake Clark

Agropyrum repens (L.) Beauv.

" 226

Elymus

Sandy lake shores. E. side, Hd. of L. Clark

Agropyron violaceum (Horn.) Var.

1902.

JULY 31

227 *Funaria*

Moss

On old sand spits & about old campfires
Hd. of Lake Clark

Ab.

I am now out 4 wks. & 12 days and have coll'd.
227 numbers which probably includes 180 species
= an average of $5\frac{1}{4}$ numbers per day

Aug 21

228 *Allium sibiricum*, L.

OK

Rocky beaches. Ilds. nr. mouth of Chukotna R.
Not ab.

(R) = Huh-thunl-hrik-ah
or Hoh-thung-hrik-ah
Lake Clark

Allium sibiricum L.

" 229 *Conioselinum Gmelini* (C. & S.) C. F. R.
Rocky beaches. Ilds. nr. mouth of Chukotna R.

f. ab. (R) = Kill-ah-thoonah
L. Clark

The dried roots & pounded and boiled & the decoction
drank in lieu of tea. The root is also eaten in
Autumn as a food plant.

Conioselinum Gmelini (Cham. & Schecht.)
Fistularia Crista-galli (L.) Waltst.

" 230

Rocky shores. Ilds. nr. mouth of Chukotna R.
f. ab. L. Clark

Rhinanthus crista-galli L.

1902.

Aug 2

231 *Arrharia*

Rare here

Close to *A. ciliata*

Sandy shores. Ilds. nr. mouth of Chukotna R.
L. Clark

Arrharia physodes Fisch." 232 *Aster foliaceus*, Lindl.

Sandy shores. Ilds. nr. mouth of Chukotna R.
f. ab. L. Clark

(R) = Hoh-thung-ik-Kuth-a

Aster sibiricus L.

"

233 ? *Potamogeton perfoliatus* Richardsonii
In 10 to 15 ft. of water. Mth. of Chukotna R.
H. Bennett.

v. ab.

Water fairly clear but marshy to taste

(R) = Tah-tloot-ah

The Indians say the mouse is very fond of this plant
& that he will wade into the water & immerse his head
to get it. *P. perfoliatus richardsonii* Bennett.

Aug 3

234 *Populus tremuloides* Michx.

OK

Slopes & hillsides.

Not ab.

Mth. of Chukotna R.
(about 1/2 mile from L. Clark)

Specs. from 2 saplings about 2 ft. high

This tree is not ab. anywhere yet observed on
the trip the first observed was along the boating
trail between L. Giamma & L. Clark and it occurred
sparingly from that point to the head of L. Clark but
evidently not in its proper habitat as no larger trees
were observed and no ornaments were seen at all.

(R) = Traht-al-zoo-yah.

The Koriais appear to have a superstitious dislike to
this tree and, if possible avoid using it even for fuel.

Potamogeton perfoliatus richardsonii
Bennett.

Aug 3 235 *Chamaedaphne*
Marshy banks. Chulitna River
v. ab. (near mouth)
(R) = Naktl-nana-thagha-thoon-ah
The dried leaves are boiled and the decoction
drank in lieu of tea.

Chamaedaphne calyculata (L.) Moench

" 236 *Myrica* Gale, L.
Ab. Marshy banks. Chulitna River (near mouth) OK
(R) = Klin-ah-loo
The stems & leaves are boiled and the decoction
drank as a remedy for coughs & hoarseness.

Myrica gale L.

Aug 4 237 *Epilobium cicutum*, Pursh. OK
f. ab. About cold springs. Noghehling River
(R) = Nil-throl-Kā
The leaves & stems are dried & used in lieu of tea -
" " " " & also used " " of tobacco -

" 238 *Dryopteris*
About cold springs. Noghehling River
Not ab. here (R) = Uh-toon-ah
The roots of this fern are boiled or cooked on hot stones
& eaten. The roots are also boiled & sugar added to the
decoction which is then allowed to stand until fermentation
takes place when it is drunk in lieu of opikay or hootch.

" 239 *Swertia perennis* L. OK
~~*Asclepias*~~ Moist ck. banks. Noghehling River
(R) = Kazh-ā-Koo'-ah
The stems & leaves are boiled & eaten as a greens
like spinach

1909.
Aug 4 240 *Sphagnum*
Tundra & open woods. W. side L. Clark
v. ab. but not noted in any locality so far visited
on this trip. (dried and)
Is used by the natives as a padding or
cushion for the basket of birch bark & willows
in which infants are carried.
At childbirth a bed of this moss thoroughly
saturated with moisture is made in front of
the fire and the patient placed upon it
until a copious perspiration is produced.
So far as could be learned this practice appears
to be followed ~~rather~~ as a long established tribal
custom rather than for any beneficial effect
which it is expected to produce.

(R) = Uh-rō-veet

(R) sometimes = Nong-Koo-yah

Aug 7 241 *Dryopteris spinulosa*
Moist woods. Noghehling Trail
f. ab.

Dryopteris spinulosa dilatata
(Hoffm.) Underw.

" 242 *Equisetum palustre* L.
Moist open woods. Noghehling Trail -
Ab. The glossy brown, lower section of the stem
of this plant is used to ornament the baskets
[Hockie] made by the Aleuts & Kanaas, by lining them
in with the fine spruce roots of which the
baskets are made, thus producing a variegated
pattern.
(R) = Chi-chi-yul-Kuth-ā
" Brown stuff = Thall-thazh-ah

242a. *Equisetum sylvaticum* L.

60.
(1902)
Aug 3) 243 *Betula*

v. ab. here Moist slopes & banks. Chutitua River
Spec. from small trees 12 to 15 ft. high.
The Indians insist that this is not
the same as Nos. 40 & 70. & call it
Kunk-Ruk-yah, while they call 40 & 70.
Kutz-e-yah

Aug 9 244 *Picea*

f. ab. Drained flats. Noghehling Trail
Tree is 168 yrs. old, 45^{ft} - 4 in. high x
10 in. diam. B. H.
Has skin long cones like *P. Can.* but
has no odor and has short foliage
like *P. Mariana* -

Picea canadensis (Mill.) B. S. P.

Aug 13 245 *Pedicularis parviflora*, J. E. Smith OK
Not ab. Margins of ponds. Noghehling Trail
Mostly submerged now owing to heavy rains
of the past 10 days.

" 246 *Aschmupsia calycina*, Presl.
Not ab. Pond Margins & open tundra.
Noghehling Trail

Agrostis rubra L.

" 247 *Cornus suecica*, L. OK (Fruit)
f. ab. Open woods & bridges in tundra.
Cornus suecica L. Noghehling Trail

Aggallus nigrescens, (Pall.) Heller 61.
Aschmupsia OK

Aug 13 248 *Aschmupsia calycina*, Presl. OK
Not ab. dry slopes & bridges in tundra
This plant was often observed but never
found in flower or fruit.
Noghehling Trail

" 249 *Vaccinium Vitis-Idaea*, L. OK
Open woods & dry ridges in tundra.
Noghehling Trail
Corr.

Vaccinium vitis-idaea L.

" 250 *Euphrasia latifolia*, Pursh.
Rare here dry ridges in tundra
Noghehling Trail

Euphrasia mollis (Ledeb.) Mett.

Aug 14 251 *Viburnum parviflorum*, Pylae OK
v. ab. Open woods Noghehling Trail
This shrub is from 3 to 10 ft. high here &
is so abundantly fruited that the branches
are bent almost to the ground.

" 16 252 *Pedicularis parviflora*, J. E. Smith OK
f. ab. Margins of Ponds. Lake Michigan
Mostly submerged at present owing to the late
heavy rains.

" " 253 *Saxifraga hirculus*, L. OK
Not ab. OK. bank of pond margin. Michigan
Saxifraga hirculus L.

Aug 16 254

Moist Ok. banks.
Not ab.

L. Iliamna

Aug 20 255 *Sorbus (malusifolia)* (C. & S.) Roem. ^{OK}
 Hillsides & open woods Lake Iliamna
 (Wm.) R = Buk-thilsh-na

Fruit is eaten & bark is chewed as a
 remedy in coughs, colds, asthma &c.
 The Natives employ the branches of this tree
 exclusively, for the brooms used about their
 houses, caches, & igloos.

" 256 *Nabalus hastatus* (Less.) Heller.

Open tundra Jinkel-Yash Trail
Not ab.

" 257 *Gentiana*
 f. ab. Open tundra Jinkel-Yash Trail
Gentiana platypetala Crise.

" 258 *Silbaldia procumbens*, L. ^{OK}

Dry rocky cliff Jinkel-Yash Trail
Not ab.

Aug 21 259

Sea weeds picked up in a trap across
 Iliamna Bay tide flats at low tide.
 Submerged under 20 feet of water at
 high tide.

Aug 22 260 *Juniperus nana*, Willd. ^{OK}

Not ab. Dry rocky cliff Iliamna Point

R = Chin-too-na
 Now in good fruit

" 261 *Rhododendron*

Not ab. Dry rocky cliff Iliamna Point

R = Chitt

Rhododendron kamschaticum Pau.

" 262 *Cryptogramma acrostichoides*, R. Br. ^{OK}

Crevices & on dry rocky cliffs
Not ab. Iliamna Point

" 263 *Achillea borealis*, Bong. ^{OK}

Open woods & Ok. banks
 Iliamna Point

Comm. R = Hoonl-Koh'-ah-dhool'-ya

1902.

Aug 23 264 *Bryopteris*

f. ab. Open woods among alders

(K) = Uh-toon-ah = No. 939. Iliamna Point

The roots of this fern are boiled or cooked on hot stones and then eaten both in Spring & Autumn.

The roots are also boiled & sugar added to the decoction which is then allowed to stand until fermentation takes place, when it is drunk in lieu of whiskey or hoochinoo. The roots are also sometimes fermented with sugar & flour & water or molasses flour & water in making hoochinoo.

Thymium cyclosorum Rupr." 24 265 *Senecio pseudo-arvica*, Less. OK

f. ab. Single beaches

Iliamna Bay

This fleshy composite was not yet in bloom on July 13. But on Aug. 24 (6 weeks later) it had already matured its fruit which is now disappearing.

Senecio pseudo-arvica, Less.*Matricaria matricarioides*, (Less.)" 266 *Matricaria physocarpa*, DC. Porter

f. ab. Open places about all old Indian Villages & old camps.

(K) = Al-lee-mush'-ka

This is the most abundant introduced weed in the whole region. *Matricaria discoidea* DC.

1902.

Aug 24 267 *Brassica*

f. ab. Open places about old Camps

Iliamna Bay
Brassica campestris L." 268 *Trifolium*

Open places about old camps

f. ab. *Trifolium repens* L. Iliamna Bay" 269 *Chenopodium* ~~leptophyllum~~ ^{leptophyllum, Nutt.}

f. ab. Open places about old camps

Iliamna Bay

Chenopodium album viride (L.) Moq." 25 270 *Echinopanax horridum*, (Smith) (fruit) OK Dec 1891.

f. ab. Open woods & gulches

Iliamna Point

" 271 *Leptitis*

Sea beach submerged at high tide

f. ab.

Alcine humifusa (Rottb.) Britton Iliamna Point" 272 *Cryptanthemum arcticum*, L. OK

f. ab. Seabeach, sometimes submerged at high tide

also on dry rocky cliffs. Iliamna Point

1902.

Aug 26 273 *Sambucus pubens*, Michx. (fl. & fruit)
~~racemosa~~
 Not ab. Open woods Cottonwood Bay

This shrub for some reason, possibly the proximity of a snow-bank during the early part of the season, is now in full bloom in this Bay.

Sambucus racemosa L.

" 274 *Iris setosa*, Pall. OK (fruit)
 f. ab. grassy glades & R. banks
 Cottonwood Bay

" 275 *Senecio Pschylo-frica*, Less. OK
 Not ab. Shingly sea beaches
 Cottonwood Bay
Senecio pseudo-arctica Less.

" 276 *Echinopanax horridum* (Smith) OK Dec. & Pl.
 f. ab. Open woods moist gulches
 Cottonwood Bay

Colld. to show crinkled condition of leaves when grown in the open.

(R) = Hush-kurr

1902

Aug 26 277 *Pneumaria myritima*, L. OK
 Shingly sea beaches
 Not ab. Cottonwood Bay

" 278 *Woodsia*
 Dry rocky clefts Iliamna Point
 Not ab.

Woodsia ilvensis (L.) R. Br.

" 279 *Armaria* (fruit)
 Dry rocky cliffs Iliamna Point
 Not ab.

Armaria arctica Stev.

" 31 280 *Woodsia*
 Dry rocky clefts S. of Iliamna Point
 Not ab.
Filix fragilis (L.) Underw.

Sept. 1 281 *Artemisia vulgaris* ~~Tilesii~~ Tilesii, Ledeb. OK
 Sandy rocky slopes above high tide
 S. of Iliamna Point

(R) = No-Kull-than - or Tsul-bunja
 Rs. say the bark is very good of the roots
 A poultice of the leaves heated on hot stones
 is applied to ~~hot stones~~ ~~etc.~~ is applied to swellings
 etc.

Artemisia Tilesii Ledeb.

1902.

Sept 1 282 *Oxyria digyna* (L.) Campfd. OK
 f. ab. Rocky slopes S. of Iliamna Point

(R) = Kosh'-a

The leaves are eaten both raw & boiled &
 the dried stems are smoked in lieu of tob.

Isopodium myosuroides, Brid.
 " 4 283 *Isopodium myosuroides*, L.)
 Moist ck. banks & moist woods
Not ab. Iliamna Point

" " 284 *Racomitrium*
 Rock slides & talus slopes
Ab. Not observed in fruit Iliamna Point

This moss is usually the first vegetation to
 obtain a footing on rock slides & talus slopes &
 is followed in due course by *Empetrum*,
Ledum etc.

" 6 285 Moss
 Moist ck. banks & moist rocks
f. ab. Iliamna Point

1902

Sept. 7 286 Silvery Lichen
Not ab. Dry rocky cliffs Near Iliamna Point

" 287 *Solidago*
 Creek banks & margins of rock slides
f. ab. Near Iliamna Point

Solidago multiradiata Ait.

" 12 288 ^{Erigeron} ~~Aster~~ *psiegrius*, (Pursh.) Greene OK
 Open grassy glades about 1000 ft. el.
Not ab. Mtn. ridge E. of Iliamna Point

" 289 *Gnaphalium*
 Open grassy glades, 1000 ft. el.
Not ab. Mtn. ridge E. of Iliamna Pt.
Sieversia rossii R. & S.

" 14 290 *Picea sitchensis*, (Bong.) T. & M. OK
 Hillsides & slopes from sea level up to about 800 ft.
Ab. Ellamar (Gladhaugh Bay)

From what I observed in this bay I judge *P. sitchensis*
 to constitute say 50 to 60% of the conifers here, *Tsuga*
heterophylla, about 25-30% and *T. & M. mertensiana*
 say 15 to 20% but *T. & M. mertensiana* is the prevailing
 tree on the sphagnum marshes. Moss
Picea sitchensis (Bong.) Traut. &

1902.

Sept 14 291 *Tsuga heterophylla* (Raf.) Sargent
Hillsides & slopes
Ab. Ellumar (Gladhaugh Bay)

One tree of this species observed here, measured
3^{ft.} - 2ⁱⁿ (say 7 1/2 dm.) Breast High.

" 292 *Tsuga Mertensiana* (Bong.) Carr. OK
Ab. Hillsides & slopes from s.l. to about 800 ft
Ellumar (Gladhaugh Bay)

This was the only conifer found growing in the
sphagnum marshes. One tree of this species (not
living but quite sound) observed here, measured 3^{ft.} - 4ⁱⁿ
= 11 M. - 2 cm. in diameter breast high.

Tsuga mertensiana (Bong.) Carr.

" 293 *Malus rivularis* (Dougl.) Roem.
Sea beach, open woods & edge of tundra.
f. ab. Ellumar (Gladhaugh Bay)

This point appears to be about the northern limit
of this tree as it was not found anywhere
N. of Cook Inlet, though fully fructed &
well established here.

Malus rivularis (Dougl.) Greene

" 294 *Impatiens biflora* Watt. OK
Sea beach margin of sphagnum marshes
Not ab. Ellumar, Alaska
Now in ripe fruit -

1902.

Sept. 14 295 *Microseris*
In sphagnum marshes
Not ab. Ellumar (Gladhaugh Bay)

Scorzonella borealis (Torr. & Gray)
Greene.

July 3 296 *Diapensia*
Rare Dry rocky banks. Jinkel-yash CK.
Differs from *D. lapponica* in having the lobes
longer & the tube shorter -

Diapensia lapponica L.

June 23 297 *Arnica alpina* (L.) Plin.
Rare In sphagnum marshes
Ellumar Bay

July 3 298 *Cassiope*
Rare Dry rocky banks. Jinkel-yash Creek
Cassiope lycopodioides (Pall.)
Don.

July 28 299 *Gentiana*
Rare Dry rocky slopes about 1500 ft. above S/L.
N.W. side Hd. of Lake Clark
Plant is so badly frost-bitten at this date as to
almost past collecting -

Gentiana glauca Pall.

72.

1902.

- July 13 300 *Arcteranthis Cooleyae* (Rose) Greene
 Moist slopes. Iliamna Pass
Rare *Ranunculus eschschottzii* Schlecht.

- " 3 301 *Cardamine bellidifolia*, L. ^{OK}
Not ab. Sandy creek banks. Jinkel-yash Trail

- " 29 302 *Cardamine*
 Rocky cliffs - S.E. side
Rare here Hd. of Lake Clark
 Probably same as No. 6.
Travis lyrata occidentalis Wats.

- " " 303 *Silene acaulis* var.
 Rocky cliffs - S.E. side
Rare Hd. of Lake Clark

Silene acaulis L.

- " " 304 *Cerastium Behringianum*, C. & S.
Not ab. Rocky cliffs - S.E. side
 Hd. of Lake Clark

Cerastium vulgatum L.

- " 3 305 *Silene acaulis*, L. ^{OK}
f. ab. Sandy ck. banks. Jinkel-yash Trail

1902.

- July 13 306 *Montia*
Rare Mucky ck. banks. Iliamna Bay
Montia fontana L.

- " 29 307 *Lathyrus maritimus*, (L.) Bigel. ^{OK}
f. ab. Sandy beaches. Hd. of Lake Clark
 (R) = Chöl'-yim-bok-ah

- " 6 308 *Potentilla*
f. ab. Dry rocky cliffs. Iliamna Point
Potentilla villosa Pau.

- " 29 309 *Hemiera ranunculifolia*, (Hook.) Raf.
Rare Rocky cliffs S.E. side
 Near Hd. of Lake Clark

Saxifraga cernua L.

- " " 310 *Saxifraga caespitosa*, L.
Not ab. Rocky cliffs S.E. side
 Near Hd. of Lake Clark

Saxifraga signiflora Steud.

- " 6 311 *Saxifraga bronchialis*, L. ^{OK}
Not ab. here Dry rocky cliffs. Iliamna Point

73.

1902.

- Aug 17 312 *Saxifraga reflexa*, Hook. ?
Not ab. Rocky cliffs - Nogaheling Rapids
Saxifraga nivalis L.

- Aug. 4 313 *Epilobium*
f. ab. About cold springs. Nogaheling River
Epilobium bongardi Hausskn.

- July 23 314 *Betula*
Not ab. Spruce shores open tundra
 Foot of Lake Clark
 Colld. form a small tree about 15 ft. high.

- July 10 315 *Agrostis*
Not ab. Open rocky slopes. Iliamna Point
Agrostis rubra L.

- Aug. 13 316 *Juncus stygius*, L. ?
Not ab. Margins of ponds. Nogaheling Trail
 A very slender form if of this species -
Juncus biglumis L.

1902.

- Sept 12 317 *Lutkea pectinata*, (Hook.) Kuntze.
Not ab. Open grassy slopes - 800 to 1500 ft. above Sea level
 Mtn. ridge E. of Iliamna Point
Lutkea pectinata (Burch.) Kuntze

- July 19 *Fomes ignarius* (L.) Fries
 Fungus from Birch tree (*Betula*
 Alaska, Sargent) - Nogaheling Trail
 The dry mature but perfectly sound
 fungus is gathered by the natives of this
 region - Kaniishaks, Kenais and
 Nogahelings - placed on a flat stone
 or piece of old tin in a bright fire
 and slowly burnt until it assumes
 almost a white heat. It is then
 carefully removed from the fire and
 on cooling falls into a fine gray ash
 of the most pungent and acrid taste.
 This ash is collected and carried in
 a babiche pouch for future use, and
 the quid of tobacco after being moist-
 ened is rolled in it before being placed
 in the mouth.

On being removed from the mouth
 the quid is placed in a quid-box

(Tabaw-thulke) made of ^{white} spruce,
 Cariboo-bone or walrus-ivory, in
 which there is a small quantity
 of this ash and is there kept till
 again required — W.W.G.

78.

79.

82.

83.

86.

87.

88.

89.

90.

91.

92.

93.

94.

95.

C 96.

253 $5\frac{3}{8} \times 8\frac{1}{8}$.

